

Applicant: Hans-Christoph MAGEL
Docket No. R.307235
Preliminary Amdt.

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-11. (Canceled)

12. **(New)** A common rail injector for injecting fuel into a combustion chamber of an internal combustion engine, having an injector housing including a fuel supply line communicating with a central high-pressure fuel source outside the injector housing and with a pressure chamber inside the injector housing, from which pressure chamber, as a function of the position of a 3/2-way control valve, fuel subjected to high pressure is injected, the improvement wherein the control valve comprises a valve piston which is movable back and forth in the injector housing between a position of repose and an injection position, which valve piston is coupled hydraulically with a piezoelectric actuator that is subjected to the pressure from the high-pressure fuel source.

13. **(New)** The common rail injector as defined by claim 12, wherein the injector housing a hydraulic coupling chamber subjected to the pressure from the high-pressure fuel reservoir, and wherein the piezoelectric actuator is coupled hydraulically with the valve piston by way of said coupling chamber.

14. **(New)** The common rail injector as defined by claim 12, further comprising a pressure face embodied on the valve piston and subjected constantly to high pressure from the fuel supply line.

15. **(New)** The common rail injector as defined by claim 13, further comprising a pressure face embodied on the valve piston and subjected constantly to high pressure from the fuel supply line.

16. **(New)** The common rail injector as defined by claim 12, wherein a first end of the valve piston defines the hydraulic coupling chamber, and a second end of the valve piston protrudes into a valve control chamber, which control chamber in the injection position of the valve piston is in communication with a fuel return and which in the position of repose of the valve piston is subjected to the pressure from the high-pressure fuel reservoir.

17. **(New)** The common rail injector as defined by claim 13, wherein a first end of the valve piston defines the hydraulic coupling chamber, and a second end of the valve piston protrudes into a valve control chamber, which control chamber in the injection position of the valve piston is in communication with a fuel return and which in the position of repose of the valve piston is subjected to the pressure from the high-pressure fuel reservoir.

18. **(New)** The common rail injector as defined by claim 14, wherein a first end of the valve piston defines the hydraulic coupling chamber, and a second end of the valve piston

protrudes into a valve control chamber, which control chamber in the injection position of the valve piston is in communication with a fuel return and which in the position of repose of the valve piston is subjected to the pressure from the high-pressure fuel reservoir.

19. **(New)** The common rail injector as defined by claim 15, wherein a first end of the valve piston defines the hydraulic coupling chamber, and a second end of the valve piston protrudes into a valve control chamber, which control chamber in the injection position of the valve piston is in communication with a fuel return and which in the position of repose of the valve piston is subjected to the pressure from the high-pressure fuel reservoir.

20. **(New)** The common rail injector as defined by claim 16, further comprising a first sealing edge on the valve piston which interrupts a communication between the valve control chamber and the fuel return when the valve piston is in the position of repose and a second sealing edge on the valve piston which interrupts a communication between the high-pressure fuel reservoir and the valve control chamber in the injection position of the valve piston.

21. **(New)** The common rail injector as defined by claim 17, further comprising a first sealing edge on the valve piston which interrupts a communication between the valve control chamber and the fuel return when the valve piston is in the position of repose and a second sealing edge on the valve piston which interrupts a communication between the high-pressure fuel reservoir and the valve control chamber in the injection position of the valve piston.

22. **(New)** The common rail injector as defined by claim 18, further comprising a first sealing edge on the valve piston which interrupts a communication between the valve control chamber and the fuel return when the valve piston is in the position of repose and a second sealing edge on the valve piston which interrupts a communication between the high-pressure fuel reservoir and the valve control chamber in the injection position of the valve piston.

23. **(New)** The common rail injector as defined by claim 19, further comprising a first sealing edge on the valve piston which interrupts a communication between the valve control chamber and the fuel return when the valve piston is in the position of repose and a second sealing edge on the valve piston which interrupts a communication between the high-pressure fuel reservoir and the valve control chamber in the injection position of the valve piston.

24. **(New)** The common rail injector as defined by claim 20, further comprising a valve piston guide portion embodied on the first end of the valve piston, the valve piston guide having a diameter somewhat less than the diameter of the first sealing edge.

25. **(New)** The common rail injector as defined by claim 24, wherein the diameter of the second sealing edge is somewhat less than the diameter of the valve piston guide portion.

26. **(New)** The common rail injector as defined by claim 24, wherein the valve piston is embodied in one piece.

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27. **(New)** The common rail injector as defined by claim 25, wherein the valve piston is embodied in one piece.

28. **(New)** The common rail injector as defined by claim 25, wherein the valve piston is embodied in two parts.

29. **(New)** The common rail injector as defined by claim 26, wherein the valve piston is embodied in two parts.

30. **(New)** The common rail injector as defined by claim 12, wherein the valve control chamber communicates with a valve member control chamber.

31. **(New)** The common rail injector as defined by claim 12, wherein the valve control chamber is in communication with a pressure booster control chamber.